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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,747	04/25/2001	William R. Finch	2069-010500	2270

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EXAMINER

BRANCOLINI, JOHN R

ART UNIT PAPER NUMBER

2153

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/844,747	FINCH, WILLIAM R.	
	Examiner	Art Unit	
	John R Brancolini	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-35 are pending in the application.

Priority

No claim for priority has been made. The effective filing date of the application is April 25, 2001.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- Page 8 line 9 of the description refers to Machine 200 in Figure 3.

However, in figure 3 the state machine is labeled as Item 10.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Oskouy et al. (US Patent 5745684), hereinafter referred to as Oskouy.

In regards to claim 1, Oskouy discloses a communication system, comprising:

- A bus including at least one data line and control lines (figure 3 shows the control bus, it is also described on col 3 lines 44-47).
- A first device coupled to the bus (figure 3 shows host system connected to the bus, it is also described on col 3 lines 44-47).
- A second device coupled to the bus, the data line being coupled between the first and second devices (figure 3 shows ATM cell interface connected to the bus, it is also described on col 3 lines 44-47).
- A handshaking unit coupled to the control lines of the bus and being adapted to determine if the first and second devices are capable of completing a data transfer and enable the first and second devices to facilitate the data transfer (the unit provided acts as handshaking unit by controlling transferring functions of the system over the data lines, col 3 line 56 – col 4 lines 4).

In regards to claim 2, Oskony discloses the control lines comprise a first data available line coupled to the first device and a second data available line coupled to the second device, and the handshaking unit is adapted to determine that the first and second devices are capable of completing the data transfer in response to the first and second data available lines being asserted (Figure 4A shows the individual control and data lines, col 3 line 56 – col 4 line 4 describes the transfer control of the handshaking unit).

In regards to claim 3, Oskony discloses the control lines include a first enable line coupled to the first device and a second enable line coupled to the second device, and the handshaking unit is adapted to assert the first and second enable lines to facilitate the data transfer (Figure 4A shows the separate control lines, the handshaking unit being operably connected to the lines for the purpose of facilitating the transfer).

In regards to claim 4, Oskony discloses the first and second devices include UTOPIA interfaces for communicating data over the bus (the system conforms to the UTOPIA standard for interfacing, col 4 lines 11-21).

In regards to claim 5, Oskony discloses the control lines include a clock line and the handshaking unit is adapted to provide a clock signal to the first and second devices on the clock line (the unit provides a steady clock, col 4 lines 55-58).

In regards to claim 6, Oskony discloses the first and second devices comprise a first pair of devices (as seen in Figure 2, each Host/NIC unit each comprise a pair of devices), and the communication system further comprises a plurality of pairs of devices (Figure 2 shows a plurality of these pairs of devices), each pair being configured to respond to a shared address (each pair of devices has one physical connection to the ATM network switch which indicates one shared physical address, see also col 3 lines 23-40 for an overview of Figure 2).

In regards to claim 7, Oskony discloses the handshaking unit is adapted to sequentially poll the pairs of devices to determine if both of the devices in a particular pair are capable of completing the data transfer (Figure 4A shows the individual control and data lines used for polling the individual devices, col 3 line 56 – col 4 line 4 describes the transfer control of the handshaking unit).

In regards to claim 8, Oskony discloses the control lines include an address line and the handshaking unit is adapted to drive an address on the address line to poll the particular pair of devices (Figure 4B shows the individual lines used for driving addresses on address specific data lines, see also col 6 lines 40-43).

In regards to claim 9, Oskony discloses the first and second devices are adapted to communicate data arranged in cells (the system communicates in ATM cells, col 4 lines 22-28).

In regards to claim 10, Oskony discloses each cell comprises an asynchronous transfer mode (ATM) cell (the system communicates in ATM cells, col 4 lines 22-28).

In regards to claim 11, Oskony discloses the first device comprises interface device and the second device comprises a modem (the first device can be an I/O interface, as well as the second device, a modem being an I/O interface, col 6 lines 40-50).

In regards to claim 12, Oskony discloses:

- An interface device having a plurality of ports (Figure 3 shows an interface with multiple ports).
- A plurality of modems, wherein each pair of devices includes one of the ports and one of the modems (multiple host devices can be attached to the bus, each host device being an I/O interface such as a modem, col 6 lines 40-50, as seen in Figure 2 each device remotely connected to the ATM switch has a modem).

In regards to claim 13, Oskony discloses a communication system, comprising:

- A bus including at least one data line (figure 3 shows the control bus, it is also described on col 3 lines 44-47).
- A first device coupled to the bus and having a UTOPIA interface for communicating over the bus (figure 3 shows host system connected to the buss,

it is also described on col 3 lines 44-47, each device utilizing the UTOPIA interface, col 4 lines 11-21).

- A second device coupled to the bus and having a UTOPIA interface for communicating over the bus, the data line being coupled between the first device and the second device (figure 3 shows ATM cell interface connected to the bus, with data lines being interconnected through the handshaking unit to the first device, col 3 lines 44-47, each device utilizing the UTOPIA interface, col 4 lines 11-21).
- A handshaking unit coupled to the bus and being adapted to provide handshaking signals to the first and second devices to complete a data transfer between the first and second devices (the unit provided acts as handshaking unit by controlling transferring functions of the system over the data lines, col 3 line 56 – col 4 lines 4).

In regards to claim 14, Oskony discloses the bus includes control lines, and the handshaking unit is adapted to provide the handshaking signals over the control lines without interfacing with the data line (Figure 4A shows the sets of control lines, with separate lines for each handshaking and data which shows the unit does not need to interface with the data lines to provide handshaking signals).

In regards to claim 15, Oskony discloses the control lines comprise a first data available line coupled to the first device and a second data available line coupled to the

second device, and the handshaking unit is adapted to determine if the first and second devices are capable of completing the data transfer in response to the first and second data available lines being asserted (Figure 4A shows the individual control and data lines, col 3 line 56 – col 4 line 4 describes the transfer control of the handshaking unit).

In regards to claim 16, Oskony discloses the control lines include a first enable line coupled to the first device and a second enable line coupled to the second device, and the handshaking unit is adapted to assert the first and second enable lines to facilitate the data transfer (Figure 4A shows the separate control lines, the handshaking unit being operably connected to the lines for the purpose of facilitating the transfer).

In regards to claim 17, Oskony discloses the control lines include a clock line and the handshaking unit is adapted to provide a clock signal to the first and second devices on the clock line (the unit provides a steady clock, col 4 lines 55-58).

In regards to claim 18, Oskony discloses the first and second devices comprise a first pair of devices(as seen in Figure 2, each Host/NIC unit each comprise a pair of devices), and the communication system further comprises a plurality of pairs of devices (Figure 2 shows a plurality of these pairs of devices), each pair being configured to respond to a shared address (each pair of devices has one physical connection to the ATM network switch which indicates one shared physical address, see also col 3 lines 23-40 for an overview of Figure 2).

In regards to claim 19, Oskony discloses the handshaking unit is adapted to sequentially poll the pairs of devices to determine if both of the devices in a particular pair are capable of completing the data transfer (Figure 4A shows the individual control and data lines used for polling the individual devices, col 3 line 56 – col 4 line 4 describes the transfer control of the handshaking unit).

In regards to claim 20, Oskony discloses the control lines include an address line and the handshaking unit is adapted to drive an address on the address line to poll the particular pair of devices (Figure 4B shows the individual lines used for driving addresses on address specific data lines, see also col 6 lines 40-43).

In regards to claim 21, Oskony discloses the first and second devices are adapted to communicate data arranged in cells (the system communicates in ATM cells, col 4 lines 22-28).

In regards to claim 22, Oskony discloses each cell comprises an asynchronous transfer mode (ATM) cell (the system communicates in ATM cells, col 4 lines 22-28).

In regards to claim 23, Oskony discloses the first device comprises 5 interface device and the second device comprises a modem (the first device can be an I/O

interface, as well as the second device, a modem being an I/O interface, col 6 lines 40-50).

In regards to claim 24, Oskony discloses:

- An interface device having a plurality of ports (Figure 3 shows an interface with multiple ports).
- A plurality of modems, wherein each pair of devices includes one of the ports and one of the modems (multiple host devices can be attached to the bus, each host device being an I/O interface such as a modem, col 6 lines 40-50, as seen in Figure 2 each device remotely connected to the ATM switch has a modem).

In regards to claim 25, Oskony discloses a method for interfacing first and second devices coupled to a bus having at least one data line coupled to the first and second devices and control lines, the method comprising:

- Determining if the first and second devices are capable of completing a data transfer based on the control lines (the unit provided acts as handshaking unit by controlling transferring functions of the system over the data lines, col 3 line 56 – col 4 lines 4).
- Providing handshaking signals on the control lines to enable the first and second devices (Figure 4A shows the handshaking lines used to enable the devices)

- Transferring the data over the data line in response to the handshaking signals (Figure 4A shows the data lines used to transfer the data after the handshaking signals).

In regards to claim 26, Oskony discloses the control lines comprise a first data available line coupled to the first device and a second data available line coupled to the second device, and determining if the first and second devices are capable of completing the data transfer comprises determining if the first and second data available lines are in an asserted state (Figure 4A shows the individual control and data lines, col 3 line 56 – col 4 line 4 describes the transfer control of the handshaking unit).

In regards to claim 27, Oskony discloses the control lines include a first enable line coupled to the first device and a second enable line coupled to the second device, and providing the handshaking signals comprises asserting the first and second enable lines to facilitate the data transfer (Figure 4A shows the separate control lines, the handshaking unit being operably connected to the lines for the purpose of facilitating the transfer).

In regards to claim 28, Oskony discloses communicating with the first and second devices over the bus using a UTOPIA interface (the system conforms to the UTOPIA standard for interfacing, col 4 lines 11-21).

In regards to claim 29, Oskony discloses the control lines include a clock line and providing the handshaking signals comprises providing a clock signal to the first and second devices on the clock line (the unit provides a steady clock to each device, col 4 lines 55-58).

In regards to claim 30, Oskony discloses the first and second devices comprise a first pair of devices (as seen in Figure 2, each Host/NIC unit each comprise a pair of devices), and the method further comprises:

- Providing a plurality of pairs of devices (Figure 2 shows a plurality of these pairs of devices),
- Configuring each pair to respond to a shared address (each pair of devices has one physical connection to the ATM network switch which indicates one shared physical address, see also col 3 lines 23-40 for an overview of Figure 2).

In regards to claim 31, Oskony discloses sequentially polling the pairs of devices to determine if both of the devices in a particular pair are capable of completing the data transfer (Figure 4A shows the individual control and data lines used for polling the individual devices, col 3 line 56 – col 4 line 4 describes the transfer control of the handshaking unit).

In regards to claim 32, Oskony discloses the control lines include an address line and the method further comprises driving an address on the address line to poll the

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particular pair of devices (Figure 4B shows the individual lines used for driving addresses on address specific data lines, see also col 6 lines 40-43).

In regards to claim 33, Oskony discloses transferring the data comprises transferring the data arranged in cells (the system communicates in ATM cells, col 4 lines 22-28).

In regards to claim 34, Oskony discloses transferring the data comprises transferring the data arranged in asynchronous transfer mode (ATM) cells (the system communicates in ATM cells, col 4 lines 22-28).

In regards to claim 35, Oskony discloses:

- Providing an interface device having a plurality of ports (Figure 3 shows an interface with multiple ports).
- Providing a plurality of modems, wherein each pair of devices includes one of the ports and one of the modems (multiple host devices can be attached to the bus, each host device being an I/O interface such as a modem, col 6 lines 40-50, as seen in Figure 2 each device remotely connected to the ATM switch has a modem).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


Rumer (US Patent 6618376), an ATM UTOPIA bus snooper which acts as a medium between a sender and a receiver to insure the communication is possible over the common bus lines.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R Brancolini whose telephone number is (571) 272-3948. The examiner can normally be reached on M-Th 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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